

## ABSTRACT OF THE DISCLOSURE

To make a three-dimensional object, an optical beam is first irradiated on a predetermined portion of a powder layer to form a sintered layer, which is then  
5 covered with a new powder layer. The optical beam is again irradiated on a predetermined portion of the new powder layer to form another sintered layer that has been united with the underlying sintered layer. These processes are repeatedly carried out to form a plurality of sintered layers united together. When the second lower density layer is formed on the first higher density layer, a  
10 powder material layer for the lower density layer is formed at a predetermined thickness so as to have a thickness suitable for sintering condition and then the powder material layer is sintered to form the lower density layer.